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October 6, 1997

BY HAND DELIVERY

William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: ***Ex Parte* Presentation**
ET Docket No. 95-183, RM-8553, PP Docket No. 93-253

Dear Mr. Caton:

The attached materials were hand-delivered to Rudolfo L. Baca, Legal Advisor to Commissioner Quello. In accordance with Rule 1.1206(b), the original and six copies (two for each Docket or Rulemaking number) of these materials have been submitted this 6th day of October to the Office of the Secretary. Questions regarding this matter should be directed to the undersigned.

Sincerely,

Lee W. Tiedrich
Jennifer A. Johnson

Counsel for WAVTrace

Attachments

cc: Rudolfo L. Baca, Esq.
Jackie Chorney, Esq.
David R. Siddall, Esq.
Suzanne Toller, Esq.

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October 6, 1997

BY HAND DELIVERY

Rudolfo L. Baca, Esq.
Legal Advisor to Commissioner Quello
Federal Communications Commission
1919 M Street, N.W.
Room 802
Washington, D.C. 20554

Re: ET Docket No. 95-183, RM-8553, PP Docket No. 93-253

Dear Rudy:

As a follow-up to our meeting on Friday regarding the above-captioned 38 GHz rulemaking proceeding, attached please find a mark-up of Section 101.115 of the Commission's Rules which indicates the change that would need to be made in order to exempt 38 GHz licensees from the restrictive Standard A antenna requirement. The relaxation of these antenna requirements would facilitate the efficient use of this spectrum for point-to-multipoint operations. Conforming changes would need to be made in other Part 101 rules in order to clarify that point-to-multipoint operations are permitted in the 38 GHz band. For example, Section 101.3 would need to be amended to include common carrier fixed point-to-multipoint services and to expand the definition of "Nodal Station" to include a reference to 38 GHz operations. Changes also might be required in Sections 101.5(b), 101.101, 101.139, 101.147(a), and 101.147(u).

We expect to provide a more detailed explanation of these conforming changes tomorrow. If you have any questions regarding the specific language changes in the interim, please do not hesitate to call.

Sincerely,

Lee L. Tiedrich
Jennifer A. Johnson

Counsel for WAVTrace

Attachments

§ 101.115 Directional antennas.

(a) Unless otherwise authorized upon specific request by the applicant, each station authorized under the rules of this part must employ a directional antenna adjusted with the center of the major lobe of radiation in the horizontal plane directed toward the receiving station with which it communicates: *provided, however*, where a station communicates with more than one point, a multi- or omni-directional antenna may be authorized if necessary. New Periscope antenna systems will not, under ordinary circumstances, be authorized.

(b) Stations operating below 932.5 MHz that are required to use directional antennas must employ antennas meeting the standards indicated below. (Maximum beamwidth is for the major lobe of radiation at the half power points. Suppression is the minimum attenuation required for any secondary lobe signal and is referenced to the maximum signal in the main lobe.)

Frequency range	Maximum beamwidth (degrees)	Suppression (dB)
512 to 932.5 MHz	20	13

(c) Fixed stations (other than temporary fixed stations and DEMS nodal stations) operating at 932.5 MHz or higher must employ transmitting and receiving antennas (excluding second receiving antennas for operations such as space diversity) meeting the appropriate performance Standard A indicated below, except that in areas not subjected to frequency congestion antennas meeting performance Standard B may be used subject to the requirements set forth in paragraph (d) of this section.

[38 GHz nodal Stations]

ANTENNA STANDARDS

Frequency (MHz)	Category	Maximum beam width to 3 dB points (included angles in degrees)	Minimum antenna gain (dBi)	Minimum radiation suppression to angle in degrees from centerline of main beam in decibels						
				5° to 10°	10° to 15°	15° to 20°	20° to 30°	30° to 100°	100° to 140°	140° to 180°
932.5 to 935	A	14.0	N/A	.....	6	11	14	17	20	24
	B	20.0	N/A	.....	.....	6	10	13	15	20
941.5 to 944	A	14.0	N/A	.....	6	11	14	17	20	24
	B	20.0	N/A	.....	.....	6	10	13	15	20
952 to 960[4,9]	A	14.0	N/A	.....	6	11	14	17	20	24
	B	20.0	N/A	.....	.....	6	10	13	15	20
1,850 to 2,500[11]	A	5.0	N/A	12	18	22	25	29	33	39
	B	8.0	N/A	5	18	20	20	25	28	36
3,700 to 4,200	A	N/A	36	23	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	32	32	32
5,925 to 6,425[6]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	21	25	29	32	35	39	45
5,925 to 6,425[8]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36
6,525 to 6,875[6]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	21	25	29	32	35	39	45
6,525 to 6,875[8]	A	1.5	N/A	26	29	32	34	38	41	49
	B	2.0	N/A	21	25	29	32	35	39	45
10,550 to 10,680[4,5]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	35	39
10,550 to 10,680[6]	A	3.4	34	20	24	28	32	35	55	55
	B	3.4	34	20	24	28	32	35	35	39
10,565 to 10,615[7]	N/A	360	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10,630 to 10,680[7]	N/A	N/A	34	20	24	28	32	35	36	36
10,700 to 11,700[6]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36
12,200 to 13,250[12]	A	1.0	N/A	23	28	35	39	41	42	50
	B	2.0	N/A	20	25	28	30	32	37	47
17,700 to 18,820	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36
18,920 to 19,700[1]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36
21,200 to 23,600[10]	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36
31,000 to 31,300[2,3]	N/A	4.0	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Above 31,300	A	N/A	36	25	29	33	36	42	55	55
	B	N/A	36	20	24	28	32	35	36	36

[1] DEMS User Station antennas in this band must meet performance Standard B and have a minimum antenna gain of 34 dBi. The maximum beamwidth requirement does not apply to DEMS User Stations. DEMS Nodal Stations need not comply with these standards.

[2] The minimum front-to-back ratio must be 38 dBi.

[3] Mobile, except aeronautical mobile, stations need not comply with these standards.

[4] Except for antennas between 140° and 180° authorized or pending on January 1, 1989, in the band 10,550 to 10,565 MHz for which minimum radiation to suppression to angle (in degrees) from centerline of main beam is 36 decibels.

[5] These antenna standards apply to all point-to-point stations authorized after June 1, 1997. Existing licensees and pending applicants on that date are grandfathered and need not comply with these standards.

[6] These antenna standards apply to all point-to-point stations authorized on or before June 1, 1997.

[7] These antenna standards apply only to DEMS User Stations licensed, in operation, or applied for prior to July 15, 1993.

[8] Except for Multiple Address System frequencies listed in where omnidirectional antennas may be used.

[9] Antennas used at outlying stations as part of a central protection alarm system need conform to only the following 2 standards: (i) The minimum on-beam forward gain must be at least 10 dBi; and (ii) the minimum front-to-back ratio must be at least 20 dB.

[10] Except as provided in § 101.147(t). Note to paragraph (10): Stations must employ an antenna that meets the performance standards for Category A, except that in areas not subject to frequency congestion, antennas meeting standards for Category B may be employed. Note, however, that the Commission may require the use of high performance antennas where interference problems can be resolved by the use of such antennas.

[11] Omnidirectional antennas may be authorized in the band 2150–2160 MHz.

[12] Except for temporary-fixed operations in the band 13200–13250 MHz with output powers less than 250 mW and as provided in § 101.147(q).

(d) The Commission shall require the replacement of any antenna or periscope antenna system of a permanent fixed station operating at 932.5 MHz or higher that does not meet performance Standard A specified in paragraph (c)

of this section, at the expense of the licensee operating such antenna, upon a showing that said antenna causes or is likely to cause interference to (or receive interference from) any other authorized or applied for station whereas a higher performance antenna is not likely to involve such interference. Antenna performance is expected to meet the standards of paragraph (c) of this section for parallel polarization. For cases of potential interference, an antenna will not be considered to meet Standard A unless the parallel polarization performance for the discrimination angle involved meets the requirements, even if the cross-polarization performance controls the interference.

(e) In cases where passive reflectors are employed in conjunction with transmitting antenna systems, the foregoing paragraphs of this section also will be applicable. However, in such instances, the center of the major lobe of radiation from the antenna normally must be directed at the passive reflector, and the center of the major lobe of radiation from the passive reflector directed toward the receiving station with which it communicates.

(f) Periscope antennas used at an electric power facility plant area will be excluded from the requirements of paragraph (c) of this section on a case-by-case basis where technical considerations or safety preclude the use of other types of antenna systems.

(g) In the event harmful interference is caused to the operation of other stations, the Commission may, after notice and opportunity for hearing, order changes to be made in the height, orientation, gain and radiation pattern of the antenna system.